



**Weekly Field Work Summary
15-19 October 2018
PFAS RI Field Program, Former Fort Devens, Massachusetts**

1.0 WORK COMPLETED LAST WEEK

1.1 DPT Groundwater Profiling

Vertical profiling continued at AOC 74 and AOC 75.

- 74VP-18-03 completed. Samples collected from 72-76 to 112-116 ft bgs. Refusal at 119.5 ft bgs.
- 75VP-18-08 completed. Samples collected from 107-111 to 137-141 ft bgs. Refusal at 151 ft bgs. Unable to retrieve a sample from the deepest interval because the rods bent as a result of the drilling depth, and the screen could not be exposed.
- 75VP-18-09 completed. Samples collected from 22-26 to 110-115 ft bgs. Refusal at 115 ft bgs.
- 75VP-18-03 completed. Samples collected from 22-26 to 102-106 ft bgs. Refusal was not encountered.
- 75VP-18-04 completed. Samples collected from 22-26 to 102-106 ft bgs. Refusal was not encountered.

1.2 Existing Well Sampling

Existing well sampling for Area 1 is complete.

1.3 Soil Sampling

No work conducted this week.

1.4 Surface Water and Sediment Sampling

A surface water and sediment sample will be collected from Balch Pond, once access to the pond is attained. This is the only remaining surface water and sediment sample that needs to be collected for Area 1.

1.5 Overburden Monitoring Well Installation

No work conducted this week.

1.6 Bedrock Monitoring Well Installation

No work conducted this week.

2.0 FIELD CHANGES

Vertical profile location 75VP-18-05 was moved because the location was too steep for the drill rig. Vertical profile location 74VP-18-04 was moved because it is in a storm water detection pond. Both changes are discussed in Section 4.0. The field change log is attached.

3.0 ANALYTICAL RESULTS

Analytical results received on October 19, 2018 are attached (preliminary/unvalidated). The data include one surface water sample from Cold Spring Brook and samples from seven existing monitoring wells at AOC 57.

4.0 RECOMMENDATIONS

Vertical profiling location 75VP-18-05 was moved approximately 50 feet north because the originally proposed location was in an area that is too steep for the drill rig. The revised location is shown on the attached map.

Vertical profiling location 74VP-18-04 was moved approximately 50 feet northeast. The originally proposed location was in a storm water detention area with steep sides in all directions and the drill rig would be unable to access the location and the floor of the detention area may be too soft. The revised location is shown on the attached map.



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Bending of rods in the middle of the drill string has occurred at two locations where refusal was encountered deeper than 140 feet. At 75VP-18-08, the rods were bent from approximately 25 ft bgs to 140 ft bgs. The rods at the top of the string (0 to 20 ft bgs) and the bottom of the string (140 to 150 ft bgs) were not bent. In order to reduce the occurrence of bent and/or broken rods, the following variance to the direct push vertical profiling methodology is proposed for locations where refusal is not encountered within 100 ft bgs:

Collect groundwater samples with the SP16 at 10-foot intervals from the water table to approximately 100 ft bgs. Remove the SP16 tooling from the hole. Advance an open 3-inch casing into the hole to approximately 70 ft bgs. Wash any material from the 3-inch casing. Advance the SP16 tooling through the 3-inch casing and continue vertical profiling from 110 ft bgs to refusal purging 2-tooling volumes at each interval. The 3-inch casing may be rinsed out as needed but the 3-inch casing will not be advanced to less than 30 feet from the SP16 screen. Water will only be introduced to wash the 3-inch casing. Groundwater samples will be collected via the SP16 screen only from intervals greater than 30 feet from the bottom of the 3-inch casing and from intervals that have not been previously drilled. The SP16 screen would only be opened to portions of the aquifer that have not been disturbed. It is anticipated that the 3-inch casing will provide lateral stability to the SP16 tooling as it is advanced past 100 ft bgs.

5.0 QUALITY CONTROL AND SAFETY

Daily QC review of field notes was performed by KGS. On-site assessment of quality and safety was performed on 18 October 2018 by the KGS. No safety issues or incidents occurred during the week.

6.0 DELAYS/IMPACTS/ISSUES

- The vertical profiling will be limited to 100 ft bgs until a modification to the methodology is approved. The vertical profiling data will be evaluated once received from the lab to determine whether locations where refusal was not encountered need to be revisited to collect deeper samples.
- Modifications to the sampling screen and drilling procedures are being evaluated to increase efficiency and decrease potential for bent or broken drilling rods.
- Vegetation clearing is required to access DPT locations at AOC 57 and 74. KGS is discussing clearing needs with MassDevelopment.
- Some of the drilling locations will be revised based on results of utility locating activities, safety considerations, and physical access considerations. The specific revisions will be presented in future weekly reports.

7.0 WORK PLANNED FOR NEXT WEEK

7.1 DPT Groundwater Profiling

Continue DPT locations AOC 75 and commence at AOC 57. Five vertical profiling locations remain for AOC 74 and five vertical profiling locations remain for AOC 75.

7.2 Existing Well Sampling

No work planned.

7.3 Soil Sampling

No work planned.

7.4 Surface Water and Sediment Sampling

No work planned.



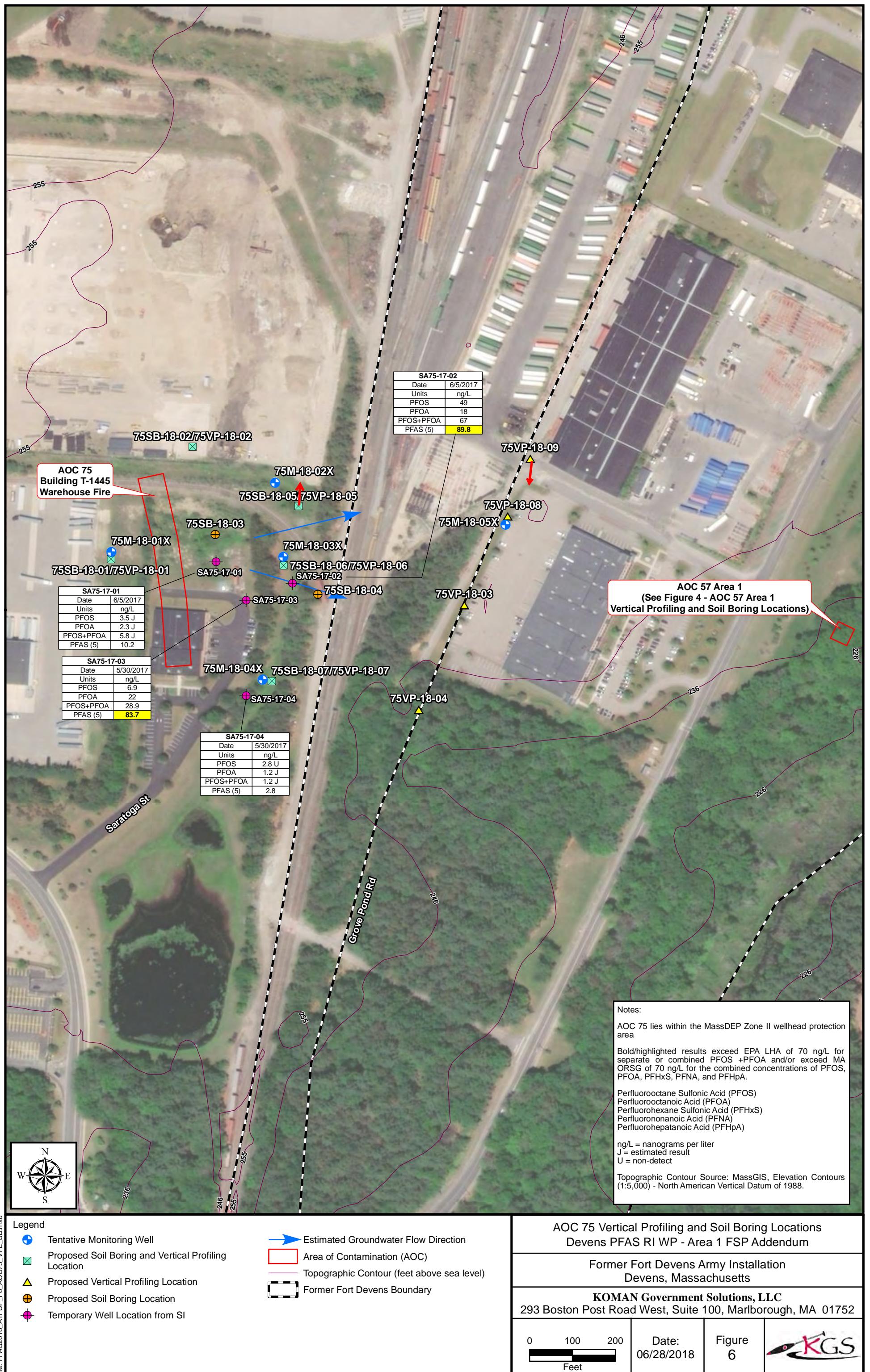
**Weekly Field Work Summary
15-19 October 2018
PFAS RI Field Program, Former Fort Devens, Massachusetts**

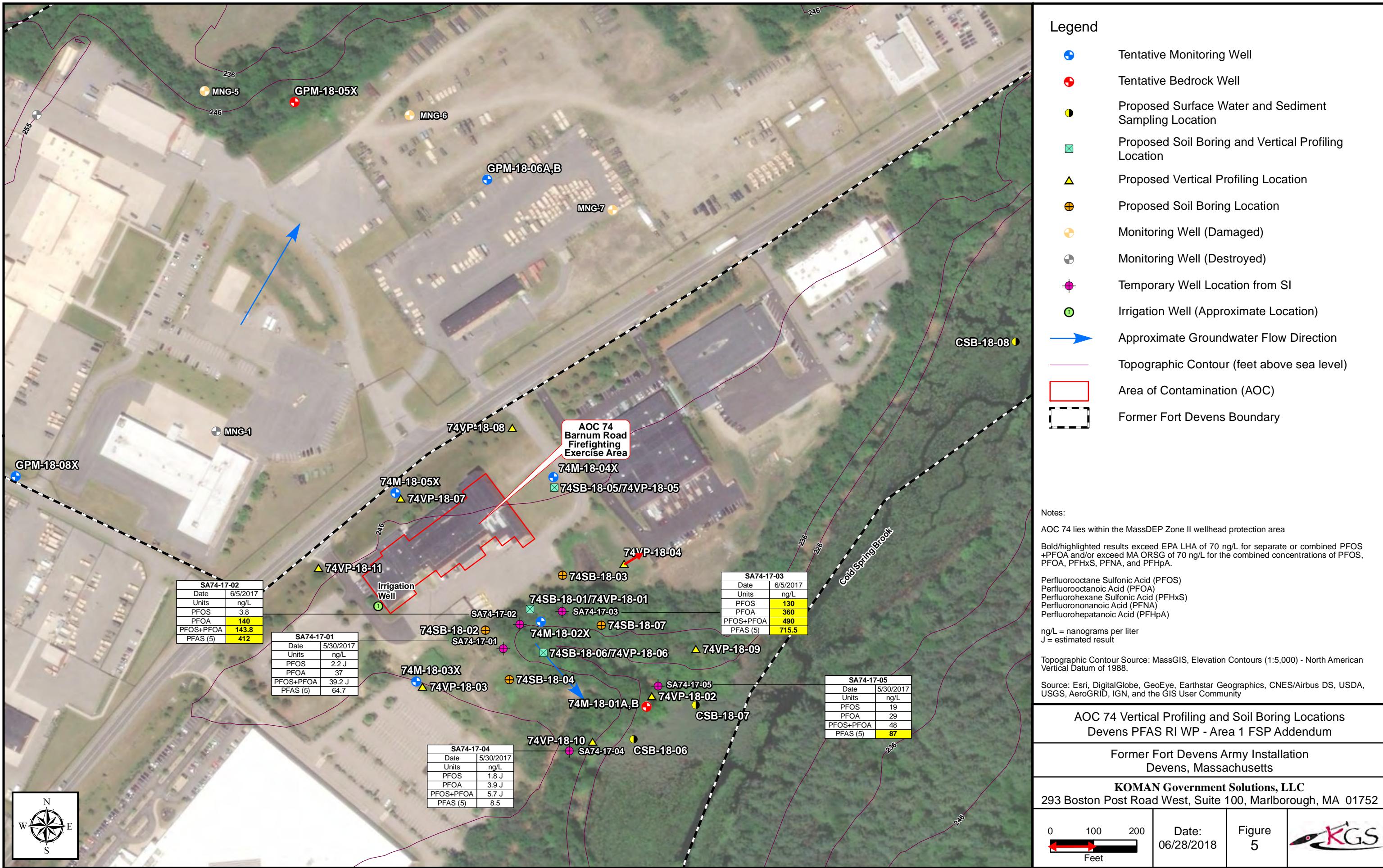
7.5 Overburden Monitoring Well Installation

No work planned.

8.0 FIELD SCHEDULE

The updated field schedule for the prior week and next three weeks is attached.







Field Change Log
PFAS Remedial Investigation Field Program
Former Fort Devens, Devens, Massachusetts

10/19/2018

Change No.	Date	Area	AOC	Location ID	Description	Action Taken
1	9/25/2018	1	57	57M-96-10X	Existing well blocked with roots/vegetation.	Sample will not be collected.
2	10/1/2018	1	57	57WP-05-01	Existing well could not be located.	Sample will not be collected.
3	10/5/2018	1	Grove Pond	92-5	Existing well is blocked with equipment and sample tubing could not be inserted.	Sample will not be collected.
4	10/5/2018	1	Grove Pond	92-2	Existing well is severely bent and a sampling tube could not be inserted to the well screen.	Sample will not be collected.
5	10/5/2018	1	75	75VP-18-09	The proposed location is within a high traffic area posing a health and safety risk.	Location was moved approximately 30 feet to the south.
6	10/19/2018	1	75	75VP-18-05	The proposed location is in an area too steep for the drill rig.	Location was moved approximately 50 feet to the north.
7	10/19/2018	1	74	74VP-18-04	The proposed location is within a storm water detention pond with steep sides that the drill rig cannot navigate.	Location was moved approximately 50 feet to the northeast.
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Devens PFAS Remedial Investigation Field Work Schedule

Field Staff Schedule

22-Oct-18

Task	Start	Finish	10/15/2018	10/16/2018	10/17/2018	10/18/2018	10/19/2018	10/20/2018	10/21/2018	10/22/2018	10/23/2018	10/24/2018	10/25/2018	10/26/2018	10/27/2018	10/28/2018	10/29/2018	10/30/2018	10/31/2018	11/1/2018	11/2/2018	11/3/2018	11/4/2018	11/5/2018	11/6/2018	11/7/2018	11/8/2018	11/9/2018
Establish Staging Area	9/24/2018	10/19/2018																										
Existing Well Sampling	9/24/2018	10/5/2018																										
SW/SED Sampling	9/26/2018	10/3/2018																										
GW Profiling																												
DPT Rig 1	10/1/2018	12/21/2018	KA	KA	KA	KA	KA		KA	KA	KA	KA	KA		KA	KA	KA	KA	KA		KA							
DPT Rig 2	10/8/2018	12/21/2018	DK	DK	DK	DK/AK	AK		AK	AK	AK	AK	AK		AK	DK	DK	DK	DK		DK							
Soil Sampling	1/2/2019	1/11/2019																										
OB Monitoring Wells																												
Rig 1	1/2/2019	2/1/2019																										
Rig 2	1/2/2019	2/1/2019																										
OB Well Sampling	2/4/2019	2/8/2019																										

KA = Kevin Anderson (KGS)

MM = Melissa Miller (KGS)

BA = Brett Anchukaitis (KGS)

CV = Chris Vignola (KGS)

OJ = Owen Jackson (KGS)

DK = David Kortjohn (Jacobs)

AK = Alex Klisiaris (Jacobs)

Devens PFAS RI Unvalidated Data Received 10/19/18

Test America SDG 320-43615- Preliminary PFAS Data

Sample Name	Sampled	CAS Number	Analyte	Result	Units	Qualifier	Dilution
CSB-18-08-SW-SEP18	9/24/2018 12:45 PM	307-24-4	Perfluorohexanoic acid (PFHxA)	10	ng/L		1.0
CSB-18-08-SW-SEP18	9/24/2018 12:45 PM	375-85-9	Perfluoroheptanoic acid (PFHpA)	6.4	ng/L	M	1.0
CSB-18-08-SW-SEP18	9/24/2018 12:45 PM	335-67-1	Perfluorooctanoic acid (PFOA)	13	ng/L	M	1.0
CSB-18-08-SW-SEP18	9/24/2018 12:45 PM	375-95-1	Perfluorononanoic acid (PFNA)	0.94	ng/L	J	1.0
CSB-18-08-SW-SEP18	9/24/2018 12:45 PM	335-76-2	Perfluorodecanoic acid (PFDA)	0.53	ng/L	J	1.0
CSB-18-08-SW-SEP18	9/24/2018 12:45 PM	2058-94-8	Perfluoroundecanoic acid (PFUnA)	1.4	ng/L	U	1.0
CSB-18-08-SW-SEP18	9/24/2018 12:45 PM	307-55-1	Perfluorododecanoic acid (PFDoA)	1.4	ng/L	U	1.0
CSB-18-08-SW-SEP18	9/24/2018 12:45 PM	72629-94-8	Perfluorotridecanoic acid (PFTriA)	2.8	ng/L	U	1.0
CSB-18-08-SW-SEP18	9/24/2018 12:45 PM	376-06-7	Perfluorotetradecanoic acid (PFTeA)	2.8	ng/L	U	1.0
CSB-18-08-SW-SEP18	9/24/2018 12:45 PM	375-73-5	Perfluorobutanesulfonic acid (PFBS)	1.5	ng/L	J M	1.0
CSB-18-08-SW-SEP18	9/24/2018 12:45 PM	355-46-4	Perfluorohexanesulfonic acid (PFHxS)	6.4	ng/L	M	1.0
CSB-18-08-SW-SEP18	9/24/2018 12:45 PM	1763-23-1	Perfluorooctanesulfonic acid (PFOS)	3.1	ng/L	J M	1.0
CSB-18-08-SW-SEP18	9/24/2018 12:45 PM	2355-31-9	N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	9.4	ng/L	U	1.0
CSB-18-08-SW-SEP18	9/24/2018 12:45 PM	2991-50-6	N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	9.4	ng/L	U M	1.0
CSB-18-08-SW-SEP18	9/24/2018 12:45 PM	27619-97-2	1H,1H,2H,2H-perfluoroctanesulfonic acid (6:2)	17	ng/L	U	1.0
CSB-18-08-SW-SEP18	9/24/2018 12:45 PM	39108-34-4	1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)	9.4	ng/L	U	1.0
57M-95-03X_SEP18	9/24/2018 4:20 PM	307-24-4	Perfluorohexanoic acid (PFHxA)	43	ng/L	M	1.0
57M-95-03X_SEP18	9/24/2018 4:20 PM	375-85-9	Perfluoroheptanoic acid (PFHpA)	72	ng/L	M	1.0
57M-95-03X_SEP18	9/24/2018 4:20 PM	335-67-1	Perfluorooctanoic acid (PFOA)	290	ng/L		1.0
57M-95-03X_SEP18	9/24/2018 4:20 PM	375-95-1	Perfluorononanoic acid (PFNA)	0.92	ng/L	J M	1.0
57M-95-03X_SEP18	9/24/2018 4:20 PM	335-76-2	Perfluorodecanoic acid (PFDA)	0.98	ng/L	U	1.0
57M-95-03X_SEP18	9/24/2018 4:20 PM	2058-94-8	Perfluoroundecanoic acid (PFUnA)	1.5	ng/L	U	1.0
57M-95-03X_SEP18	9/24/2018 4:20 PM	307-55-1	Perfluorododecanoic acid (PFDoA)	1.5	ng/L	U	1.0
57M-95-03X_SEP18	9/24/2018 4:20 PM	72629-94-8	Perfluorotridecanoic acid (PFTriA)	2.9	ng/L	U	1.0
57M-95-03X_SEP18	9/24/2018 4:20 PM	376-06-7	Perfluorotetradecanoic acid (PFTeA)	2.9	ng/L	U	1.0
57M-95-03X_SEP18	9/24/2018 4:20 PM	375-73-5	Perfluorobutanesulfonic acid (PFBS)	8.6	ng/L	M	1.0
57M-95-03X_SEP18	9/24/2018 4:20 PM	355-46-4	Perfluorohexanesulfonic acid (PFHxS)	5.3	ng/L	M	1.0
57M-95-03X_SEP18	9/24/2018 4:20 PM	1763-23-1	Perfluorooctanesulfonic acid (PFOS)	4.3	ng/L	M	1.0
57M-95-03X_SEP18	9/24/2018 4:20 PM	2355-31-9	N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	9.8	ng/L	U	1.0
57M-95-03X_SEP18	9/24/2018 4:20 PM	2991-50-6	N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	9.8	ng/L	U	1.0
57M-95-03X_SEP18	9/24/2018 4:20 PM	27619-97-2	1H,1H,2H,2H-perfluoroctanesulfonic acid (6:2)	20	ng/L	U	1.0
57M-95-03X_SEP18	9/24/2018 4:20 PM	39108-34-4	1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)	9.8	ng/L	U	1.0
57P-98-03X_SEP18	9/25/2018 6:00 PM	307-24-4	Perfluorohexanoic acid (PFHxA)	190	ng/L	M	1.0
57P-98-03X_SEP18	9/25/2018 6:00 PM	375-85-9	Perfluoroheptanoic acid (PFHpA)	12	ng/L		1.0
57P-98-03X_SEP18	9/25/2018 6:00 PM	335-67-1	Perfluorooctanoic acid (PFOA)	7.9	ng/L	M	1.0
57P-98-03X_SEP18	9/25/2018 6:00 PM	375-95-1	Perfluorononanoic acid (PFNA)	1.5	ng/L	U	1.0
57P-98-03X_SEP18	9/25/2018 6:00 PM	335-76-2	Perfluorodecanoic acid (PFDA)	0.99	ng/L	U	1.0
57P-98-03X_SEP18	9/25/2018 6:00 PM	2058-94-8	Perfluoroundecanoic acid (PFUnA)	1.5	ng/L	U	1.0

Devens PFAS RI Unvalidated Data Received 10/19/18

Sample Name	Sampled	CAS Number	Analyte	Result	Units	Qualifier	Dilution
57P-98-03X_SEP18	9/25/2018 6:00 PM	307-55-1	Perfluorododecanoic acid (PFDoA)	1.5	ng/L	U	1.0
57P-98-03X_SEP18	9/25/2018 6:00 PM	72629-94-8	Perfluorotridecanoic acid (PFTriA)	3.0	ng/L	U	1.0
57P-98-03X_SEP18	9/25/2018 6:00 PM	376-06-7	Perfluorotetradecanoic acid (PFTeA)	3.0	ng/L	U	1.0
57P-98-03X_SEP18	9/25/2018 6:00 PM	375-73-5	Perfluorobutanesulfonic acid (PFBS)	13	ng/L	M	1.0
57P-98-03X_SEP18	9/25/2018 6:00 PM	355-46-4	Perfluorohexanesulfonic acid (PFHxS)	6.2	ng/L	M	1.0
57P-98-03X_SEP18	9/25/2018 6:00 PM	1763-23-1	Perfluoroctanesulfonic acid (PFOS)	3.0	ng/L	U	1.0
57P-98-03X_SEP18	9/25/2018 6:00 PM	2355-31-9	N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	9.9	ng/L	U	1.0
57P-98-03X_SEP18	9/25/2018 6:00 PM	2991-50-6	N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	9.9	ng/L	U	1.0
57P-98-03X_SEP18	9/25/2018 6:00 PM	27619-97-2	1H,1H,2H,2H-perfluoroctanesulfonic acid (6:2)	20	ng/L	U	1.0
57P-98-03X_SEP18	9/25/2018 6:00 PM	39108-34-4	1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)	9.9	ng/L	U	1.0
57M-96-11X-SEP18	9/25/2018 4:20 PM	307-24-4	Perfluorohexanoic acid (PFHxA)	210	ng/L	M	1.0
57M-96-11X-SEP18	9/25/2018 4:20 PM	375-85-9	Perfluoroheptanoic acid (PFHpA)	74	ng/L	J1	1.0
57M-96-11X-SEP18	9/25/2018 4:20 PM	335-67-1	Perfluoroctanoic acid (PFOA)	110	ng/L	J1	1.0
57M-96-11X-SEP18	9/25/2018 4:20 PM	375-95-1	Perfluorononanoic acid (PFNA)	1.5	ng/L	U M	1.0
57M-96-11X-SEP18	9/25/2018 4:20 PM	335-76-2	Perfluorodecanoic acid (PFDA)	0.99	ng/L	U	1.0
57M-96-11X-SEP18	9/25/2018 4:20 PM	2058-94-8	Perfluoroundecanoic acid (PFUnA)	1.5	ng/L	U	1.0
57M-96-11X-SEP18	9/25/2018 4:20 PM	307-55-1	Perfluorododecanoic acid (PFDoA)	1.5	ng/L	U	1.0
57M-96-11X-SEP18	9/25/2018 4:20 PM	72629-94-8	Perfluorotridecanoic acid (PFTriA)	3.0	ng/L	U	1.0
57M-96-11X-SEP18	9/25/2018 4:20 PM	376-06-7	Perfluorotetradecanoic acid (PFTeA)	3.0	ng/L	U	1.0
57M-96-11X-SEP18	9/25/2018 4:20 PM	375-73-5	Perfluorobutanesulfonic acid (PFBS)	18	ng/L	M	1.0
57M-96-11X-SEP18	9/25/2018 4:20 PM	355-46-4	Perfluorohexanesulfonic acid (PFHxS)	7.3	ng/L	M	1.0
57M-96-11X-SEP18	9/25/2018 4:20 PM	1763-23-1	Perfluoroctanesulfonic acid (PFOS)	3.0	ng/L	U M	1.0
57M-96-11X-SEP18	9/25/2018 4:20 PM	2355-31-9	N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	9.9	ng/L	U	1.0
57M-96-11X-SEP18	9/25/2018 4:20 PM	2991-50-6	N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	9.9	ng/L	U	1.0
57M-96-11X-SEP18	9/25/2018 4:20 PM	27619-97-2	1H,1H,2H,2H-perfluoroctanesulfonic acid (6:2)	19	ng/L	U	1.0
57M-96-11X-SEP18	9/25/2018 4:20 PM	39108-34-4	1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)	9.7	ng/L	U	1.0
57P-98-04X-SEP18	9/25/2018 6:05 PM	307-24-4	Perfluorohexanoic acid (PFHxA)	82	ng/L		1.0
57P-98-04X-SEP18	9/25/2018 6:05 PM	375-85-9	Perfluoroheptanoic acid (PFHpA)	12	ng/L	M	1.0
57P-98-04X-SEP18	9/25/2018 6:05 PM	335-67-1	Perfluoroctanoic acid (PFOA)	2.9	ng/L	M	1.0
57P-98-04X-SEP18	9/25/2018 6:05 PM	375-95-1	Perfluorononanoic acid (PFNA)	1.4	ng/L	U	1.0
57P-98-04X-SEP18	9/25/2018 6:05 PM	335-76-2	Perfluorodecanoic acid (PFDA)	0.96	ng/L	U	1.0
57P-98-04X-SEP18	9/25/2018 6:05 PM	2058-94-8	Perfluoroundecanoic acid (PFUnA)	1.4	ng/L	U	1.0
57P-98-04X-SEP18	9/25/2018 6:05 PM	307-55-1	Perfluorododecanoic acid (PFDoA)	1.4	ng/L	U	1.0
57P-98-04X-SEP18	9/25/2018 6:05 PM	72629-94-8	Perfluorotridecanoic acid (PFTriA)	2.9	ng/L	U	1.0
57P-98-04X-SEP18	9/25/2018 6:05 PM	376-06-7	Perfluorotetradecanoic acid (PFTeA)	2.9	ng/L	U	1.0
57P-98-04X-SEP18	9/25/2018 6:05 PM	375-73-5	Perfluorobutanesulfonic acid (PFBS)	5.9	ng/L	M	1.0
57P-98-04X-SEP18	9/25/2018 6:05 PM	355-46-4	Perfluorohexanesulfonic acid (PFHxS)	7.2	ng/L	M	1.0
57P-98-04X-SEP18	9/25/2018 6:05 PM	1763-23-1	Perfluoroctanesulfonic acid (PFOS)	2.9	ng/L	U	1.0
57P-98-04X-SEP18	9/25/2018 6:05 PM	2355-31-9	N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	9.6	ng/L	U	1.0

Devens PFAS RI Unvalidated Data Received 10/19/18

Sample Name	Sampled	CAS Number	Analyte	Result	Units	Qualifier	Dilution
57P-98-04X-SEP18	9/25/2018 6:05 PM	2991-50-6	N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	9.6	ng/L	U	1.0
57P-98-04X-SEP18	9/25/2018 6:05 PM	27619-97-2	1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2)	19	ng/L	U	1.0
57P-98-04X-SEP18	9/25/2018 6:05 PM	39108-34-4	1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)	9.6	ng/L	U	1.0
57M-96-12X-SEP18	9/25/2018 11:15 AM	307-24-4	Perfluorohexanoic acid (PFHxA)	600	ng/L	D	10.0
57M-96-12X-SEP18	9/25/2018 11:15 AM	375-85-9	Perfluoroheptanoic acid (PFHpA)	110	ng/L		1.0
57M-96-12X-SEP18	9/25/2018 11:15 AM	335-67-1	Perfluorooctanoic acid (PFOA)	55	ng/L		1.0
57M-96-12X-SEP18	9/25/2018 11:15 AM	375-95-1	Perfluorononanoic acid (PFNA)	1.4	ng/L	U	1.0
57M-96-12X-SEP18	9/25/2018 11:15 AM	335-76-2	Perfluorodecanoic acid (PFDA)	0.94	ng/L	U	1.0
57M-96-12X-SEP18	9/25/2018 11:15 AM	2058-94-8	Perfluoroundecanoic acid (PFUnA)	1.4	ng/L	U	1.0
57M-96-12X-SEP18	9/25/2018 11:15 AM	307-55-1	Perfluorododecanoic acid (PFDmA)	1.4	ng/L	U	1.0
57M-96-12X-SEP18	9/25/2018 11:15 AM	72629-94-8	Perfluorotridecanoic acid (PFTriA)	2.8	ng/L	U	1.0
57M-96-12X-SEP18	9/25/2018 11:15 AM	376-06-7	Perfluorotetradecanoic acid (PFTeA)	2.8	ng/L	U	1.0
57M-96-12X-SEP18	9/25/2018 11:15 AM	375-73-5	Perfluorobutanesulfonic acid (PFBS)	51	ng/L		1.0
57M-96-12X-SEP18	9/25/2018 11:15 AM	355-46-4	Perfluorohexanesulfonic acid (PFHxS)	5.7	ng/L	M	1.0
57M-96-12X-SEP18	9/25/2018 11:15 AM	1763-23-1	Perfluorooctanesulfonic acid (PFOS)	2.8	ng/L	U	1.0
57M-96-12X-SEP18	9/25/2018 11:15 AM	2355-31-9	N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	9.4	ng/L	U	1.0
57M-96-12X-SEP18	9/25/2018 11:15 AM	2991-50-6	N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	9.4	ng/L	U	1.0
57M-96-12X-SEP18	9/25/2018 11:15 AM	27619-97-2	1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2)	19	ng/L	U	1.0
57M-96-12X-SEP18	9/25/2018 11:15 AM	39108-34-4	1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)	9.4	ng/L	U	1.0
57M-96-13X-SEP18	9/25/2018 1:20 PM	307-24-4	Perfluorohexanoic acid (PFHxA)	510	ng/L	D	10.0
57M-96-13X-SEP18	9/25/2018 1:20 PM	375-85-9	Perfluoroheptanoic acid (PFHpA)	450	ng/L	D	10.0
57M-96-13X-SEP18	9/25/2018 1:20 PM	335-67-1	Perfluorooctanoic acid (PFOA)	71	ng/L	M	1.0
57M-96-13X-SEP18	9/25/2018 1:20 PM	375-95-1	Perfluorononanoic acid (PFNA)	1.4	ng/L	U	1.0
57M-96-13X-SEP18	9/25/2018 1:20 PM	335-76-2	Perfluorodecanoic acid (PFDA)	0.97	ng/L	U	1.0
57M-96-13X-SEP18	9/25/2018 1:20 PM	2058-94-8	Perfluoroundecanoic acid (PFUnA)	1.4	ng/L	U	1.0
57M-96-13X-SEP18	9/25/2018 1:20 PM	307-55-1	Perfluorododecanoic acid (PFDmA)	1.4	ng/L	U	1.0
57M-96-13X-SEP18	9/25/2018 1:20 PM	72629-94-8	Perfluorotridecanoic acid (PFTriA)	2.9	ng/L	U	1.0
57M-96-13X-SEP18	9/25/2018 1:20 PM	376-06-7	Perfluorotetradecanoic acid (PFTeA)	2.9	ng/L	U	1.0
57M-96-13X-SEP18	9/25/2018 1:20 PM	375-73-5	Perfluorobutanesulfonic acid (PFBS)	82	ng/L		1.0
57M-96-13X-SEP18	9/25/2018 1:20 PM	355-46-4	Perfluorohexanesulfonic acid (PFHxS)	28	ng/L	M	1.0
57M-96-13X-SEP18	9/25/2018 1:20 PM	1763-23-1	Perfluorooctanesulfonic acid (PFOS)	2.9	ng/L	U	1.0
57M-96-13X-SEP18	9/25/2018 1:20 PM	2355-31-9	N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	9.7	ng/L	U	1.0
57M-96-13X-SEP18	9/25/2018 1:20 PM	2991-50-6	N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	9.7	ng/L	U	1.0
57M-96-13X-SEP18	9/25/2018 1:20 PM	27619-97-2	1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2)	19	ng/L	U	1.0
57M-96-13X-SEP18	9/25/2018 1:20 PM	39108-34-4	1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)	9.7	ng/L	U	1.0
57M-95-06X-SEP18	9/25/2018 3:30 PM	307-24-4	Perfluorohexanoic acid (PFHxA)	49	ng/L		1.0
57M-95-06X-SEP18	9/25/2018 3:30 PM	375-85-9	Perfluoroheptanoic acid (PFHpA)	100	ng/L		1.0
57M-95-06X-SEP18	9/25/2018 3:30 PM	335-67-1	Perfluorooctanoic acid (PFOA)	58	ng/L		1.0
57M-95-06X-SEP18	9/25/2018 3:30 PM	375-95-1	Perfluorononanoic acid (PFNA)	5.6	ng/L		1.0

Devens PFAS RI Unvalidated Data Received 10/19/18

Sample Name	Sampled	CAS Number	Analyte	Result	Units	Qualifier	Dilution
57M-95-06X-SEP18	9/25/2018 3:30 PM	335-76-2	Perfluorodecanoic acid (PFDA)	0.58	ng/L	J	1.0
57M-95-06X-SEP18	9/25/2018 3:30 PM	2058-94-8	Perfluoroundecanoic acid (PFUnA)	1.5	ng/L	U	1.0
57M-95-06X-SEP18	9/25/2018 3:30 PM	307-55-1	Perfluorododecanoic acid (PFDa)	1.5	ng/L	U	1.0
57M-95-06X-SEP18	9/25/2018 3:30 PM	72629-94-8	Perfluorotridecanoic acid (PFTriA)	3.0	ng/L	U	1.0
57M-95-06X-SEP18	9/25/2018 3:30 PM	376-06-7	Perfluorotetradecanoic acid (PFTeA)	3.0	ng/L	U	1.0
57M-95-06X-SEP18	9/25/2018 3:30 PM	375-73-5	Perfluorobutanesulfonic acid (PFBS)	2.9	ng/L		1.0
57M-95-06X-SEP18	9/25/2018 3:30 PM	355-46-4	Perfluorohexanesulfonic acid (PFHxS)	19	ng/L		1.0
57M-95-06X-SEP18	9/25/2018 3:30 PM	1763-23-1	Perfluorooctanesulfonic acid (PFOS)	5.7	ng/L		1.0
57M-95-06X-SEP18	9/25/2018 3:30 PM	2355-31-9	N-methylperfluoroctanesulfonamidoacetic acid (NMeFOSAA)	9.9	ng/L	U	1.0
57M-95-06X-SEP18	9/25/2018 3:30 PM	2991-50-6	N-ethylperfluoroctanesulfonamidoacetic acid (NEtFOSAA)	9.9	ng/L	U	1.0
57M-95-06X-SEP18	9/25/2018 3:30 PM	27619-97-2	1H,1H,2H,2H-perfluoroctanesulfonic acid (6:2)	20	ng/L	U	1.0
57M-95-06X-SEP18	9/25/2018 3:30 PM	39108-34-4	1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)	9.9	ng/L	U	1.0

D = dilution

J = estimated

M = manually integrated

U = non-detect